

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Montana Limestone Company, 1717 Interstate Avenue, Bismarck ND 58503
2. Type of action: Groundwater Application for Beneficial Water Use Permit 43N 30104338
3. Water source name: Groundwater
4. Location affected by project: Sections 24 and 25 T8S R25E, Sections 19 and 30 T8S R26E, Carbon County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to divert water from the groundwater, by means of two wells 300 feet (WW1) and 384 feet (WW2) deep, from January 1 to December 31 at 115 GPM up to 50 AF, from two points in the SWNE Section 25 T8S R25E and NESE Section 24 T8S R25E, Carbon County, for industrial use from January 1 to December 31. The water would be used for dust suppression at the Montana Limestone Company quarry on the southwest flank of the Pryor Mountains approximately 8 miles north of the Wyoming border. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)
Montana Department of Natural Resources and Conservation
Montana Natural Heritage Program
Montana Sage Grouse Habitat Conservation Program
United States Fish and Wildlife Service
United States Natural Resource Conservation Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity – The source of supply is groundwater and therefore is not listed as dewatered. Modeling of the availability of groundwater in the area indicates availability of water.

Determination: Not Applicable

Water quality – The source of supply is groundwater and therefore is not listed as impaired. The proposed project will not affect surface water quality.

Determination: Not Applicable

Groundwater – The proposed project will draw water from a large region of the Madison Group aquifer. Modeling indicates that the available water in the aquifer is greater than all legal demands. The proposed industrial use is considered 100% consumptive and 50 AF/YR of water would be removed from the aquifer. Use of the groundwater for dust suppression has little possibility of affecting groundwater quality. Department hydrogeologists have determined that Sage Creek may be depleted by this appropriation in an amount of 4.2 AF/Month (approximately 31.7 GPM). Flows in Sage Creek are estimated at a minimum of 1 CFS (448.8 GPM).

Determination: No significant impact

DIVERSION WORKS – The means of diversion is submersible pumps in wells 300 to 384 feet deep. The wells are in place and were drilled by a licensed well contractor. No channel or flow changes will occur, no riparian areas will be impacted and no dams or barriers are proposed.

Determination: No impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species – Within T8S R25 and 26E there are 24 animal species of concern according to the Montana Natural Heritage Program. These species include 6 species of bats, the White-tailed Prairie Dog, 14 bird species, including the Sage Grouse, the Greater Short-horned Lizard, Yellowstone Cutthroat Trout and Berry's Mountain Snail. In the same area, there are three plant species of concern: Sweetwater Milkvetch, Cary's Beardtongue and Shoshonea. Appropriation of water from two completed wells and use of the water for dust suppression within an active quarry site will not affect habitat for any animal or plant species. Barriers to migration or movement will not increase as a result of this project and limited depletion of Sage Creek is unlikely to significantly alter flows. In a letter dated, March 23, 2016, the Montana Sage Grouse Habitat Conservation Program indicated that the project was consistent with the Montana Sage Grouse Conservation Strategy and was not within two miles of an active Sage Grouse lek.

Determination: No significant impact

Wetlands – There are no mapped or known wetlands in the area of the project.

Determination: No impact

Ponds – There are no ponds within the area of the project and no ponds are proposed.

Determination: No impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE – The area of the proposed project is almost entirely quarry or limestone outcrop. There is no potential for soil degradation, saline seep or changes in moisture content. The wells and water use for dust suppression will not affect soil stability.

Determination: No impact

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS – There is no existing vegetative cover due to quarry operations. Use of groundwater for dust suppression is unlikely to allow establishment or spread of noxious weeds. Movement of trucks to distribute water could potentially carry seeds. It will be the responsibility of the land owner to monitor and control noxious weeds.

Determination: No significant impact

AIR QUALITY – Quarry operations create dust. The project proposes to use groundwater for dust suppression. The appropriation of water from wells and use for dust suppression has limited potential to negatively affect air quality from truck exhaust and significant positive effect by suppression dust.

Determination: Possible positive impact

HISTORICAL AND ARCHEOLOGICAL SITES – The project is not located on State or Federal land.

Determination: Not Applicable

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY – No demands on environmental resources of land water or energy, not discussed above are recognized.

Determination: No impact

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS – There are no known locally adopted environmental goals or plans in the proposed project area.

Determination: Not applicable

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES – The place of use for the groundwater of this project lies on the southwest flank of the Pryor Mountains adjacent to tracts of United States Forest Service, Bureau of Land Management and Crow Tribal lands. No access to these lands is available through or near the project area. Although the quarry may be a negative related to the quality of recreation activities, the specific appropriation and use of groundwater will not increase any impacts.

Determination: No impact

HUMAN HEALTH – The project has the potential to improve human health by reducing dust created by quarry operations.

Determination: Possible positive impact

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No X___ *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No impact

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact
- (c) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact
- (e) Distribution and density of population and housing? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (h) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) Safety? No significant impact
- (k) Other appropriate social and economic circumstances? No significant impact

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: No secondary impacts of the appropriation of groundwater for dust suppression are recognized.

Cumulative Impacts: No cumulative impacts are recognized. There are no pending water right applications in the area and no other permits have been issued in recent years.

3. *Describe any mitigation/stipulation measures:* None

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:* The only reasonable alternative to the project as proposed is a no action alternative. The no action alternative prevents the applicant from beneficially using water from two existing wells and prevents possible positive environmental impacts to human health and air quality. No significant negative impacts were found to result from the proposed project.

PART III. Conclusion

1. *Preferred Alternative:* Issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

2 *Comments and Responses:* None

3. *Finding:*
Yes___ No_X__ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant negative impacts from the proposed project were recognized and therefore an environmental assessment is the appropriate level of analysis.

Name of person(s) responsible for preparation of EA:

Name: Mark Elison

Title: Hydrologist

Date: 8/4/2016